

REMARKS

Paragraph [0042] has been amended to correct an informality. Specifically, in paragraph [0042], the first instance of “plane of support” was labeled with reference numeral 40. The reference numeral 40 has been replaced with the reference numeral 20, which is supported by the second instance of “plane of support” in paragraph [0042], as well as Figure 3. No new matter has been added. Upon entry of this Amendment, claims 1-13 remain pending in the present application. Reconsideration and allowance of the present application in view of the following remarks are respectfully requested.

In the Office Action dated August 24, 2004, the drawings were objected to as failing to comply with 37 C.F.R. § 1.84(p)(5) because they do not include the reference sign “40” that is mentioned in the specification at paragraph [0042]. Applicants respectfully submit that this objection is moot in view of the amendment to paragraph [0042], as the amendment corrected an informality in which an improper reference sign was used after the first instance of “plane of support.” Accordingly, Applicants respectfully request that the objection be withdrawn.

In the Office Action, Claim 5 was rejected under 35 U.S.C. § 112, ¶ 2 as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention. Applicants respectfully traverse this rejection because the negative limitation used in Claim 5 does not render the claim indefinite in the context of this application. *See* MPEP § 2173.05(i). Claim 3 depends from Claim 1 and further defines the boundary to include a boundary wall. Claim 5 also depends from Claim 1 and further defines the boundary to not include a boundary wall. Thus, Applicants have distinctly claimed the invention to include a boundary, and that boundary may or may not include a boundary wall, which is clearly described in the specification. (*See* [0041] – [0042].) Accordingly, Applicants respectfully request that the rejection be withdrawn.

In the Office Action, Claims 1-7, and 9-13 were rejected under 35 U.S.C. § 102(b) as being anticipated by Van Empel et al. (EP 0947884). Applicants respectfully traverse this rejection.

Claim 1 recites a lithographic apparatus that includes, *inter alia*, a backfill gas feed arranged in the support zone to provide a backfill gas that flows to a backside of the article when supported by the article support structure.

Van Empel et al. teaches the use of a substrate holder with a plate (2) that has a face (4) with a distributed plurality of apertures (10) that extend through the plate (2), and a wall (8) that protrudes from the face (4). The apertures (10) allow the area enclosed by the wall (8) to be

connected to a vacuum pump. (Van Empel et al. at col. 6, ln. 56 – col. 7, ln. 12.) Nowhere does Van Empel et al. disclose or suggest a backfill gas feed arranged in the support zone to provide a backfill gas that flows to a backside of the article when supported by the article support structure, as recited in Claim 1.

Accordingly, Applicants respectfully submit that Claim 1, and Claims 2-10 that depend therefrom, are patentable over Van Empel et al. and respectfully request that the rejection to Claims 1-7, 9, and 10 be withdrawn.

Claim 11 recites an article support structure for a lithographic apparatus that includes, *inter alia*, a backfill gas feed constructed and arranged in the support zone to provide a flow of backfill gas to a backside of the article when supported by the plurality of supporting protrusions.

The teachings of Van Empel et al. are described above. Nowhere does Van Empel et al. disclose or suggest a backfill gas feed constructed and arranged in the support zone to provide a flow of backfill gas to a backside of the article when supported by the plurality of supporting protrusions.

Accordingly, Applicants respectfully submit that Claim 11, and Claim 12 that depends therefrom, are patentable over Van Empel et al. and respectfully request that the rejection to Claims 11 and 12 be withdrawn.

Claim 13 recites a lithographic apparatus that includes, *inter alia*, means for providing a flow of backfill gas in the support zone for providing improved thermal conduction between the article and means for supporting the article.

The teachings of Van Empel et al. are described above. Nowhere does Van Empel et al. disclose or suggest any means for providing a flow of backfill gas in the support zone for providing improved thermal conduction between the article and means for supporting the article.

Accordingly, Applicants respectfully submit that Claim 13 is patentable over Van Empel et al. and respectfully request that the rejection to Claim 13 be withdrawn.

In the Office Action, Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Van Empel et al. in view of Tamagawa et al. (U.S. Patent No. 5,777,838). Applicants respectfully traverse this rejection.

Claim 8 depends from Claim 1, and, as explained above, is patentable over Van Empel et al. Tamagawa et al. does not disclose or suggest a backfill gas feed arranged in the support zone to provide a backfill gas that flows to a backside of the article when supported by the article support structure. Therefore, even if Tamagawa et al. were combined with Van Empel et al., which Applicants in no way concede would be proper, all of the limitations of Claim 8 are not


disclosed or suggested by Van Empel et al. and Tamagawa et al., and a *prima facie* case of obviousness has not been made.

Accordingly, Applicants respectfully submit that Claim 8 is patentable over Van Empel et al. in view of Tamagawa et al., and respectfully request that the rejection be withdrawn.

All rejections and objections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited. If any point remains at issue which the Examiner feels may best be resolved through a personal or telephone interview, please contact the undersigned at the telephone number below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,
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